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PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:
Sunderasan et al.

Application No: 09/608,501

Filed: June 30, 2000

Title: Application Program Interface For
Automating High Speed Network Access
Ordering And Provisioning Processes

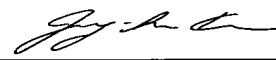
Attorney Docket No. COVDP008

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Art Unit: 2143

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AMENDMENT UNDER 37 C.F.R. §1.111

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Sir:

This is in response to the Office Action dated December 1, 2003 issued in connection with the above-identified patent application. A two-month extension of time is filed concurrently herewith extending the period for response to Monday, May 3, 2004. Accordingly, this response is timely filed. Applicant respectfully requests that the Examiner enter the Amendments and consider the Remarks presented herein.

AMENDMENT

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the subject application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method for automating communications between service providers in connection with providing a high speed network access service, comprising:

electronically receiving a request message relating to the high speed network access service from a first service provider by a second service provider of the high speed network access service via a network, the first and second service providers cooperating to provide high speed network access service to an end subscriber;

processing the request message from the first service provider automatically upon the receiving using a computer system to automatically generate a response message to the request message by the second service provider; and

electronically transmitting the response message from the second service provider to the first service provider via the network automatically upon completion of the processing,

wherein the processing of the request message by the second service provider utilizes a predefined request document tag definition and the generating of the response message by the second service provider utilizes a predefined response document tag definition.

2. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 1, wherein the processing of the request message determines a type with which the request message is associated, the type is selected from the group consisting of service availability, DSL service, order entry, order status, order summary, trouble ticket entry, trouble ticket status, and trouble ticket summary.

3. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 2, wherein the processing of the request message utilizes the predefined request document tag definition corresponding to the request message type.

4. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 2, wherein the generating of the response message generates the response message in conformity to the predefined response document tag definition corresponding to the response message type and associates the response message with the request message type.

5. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 2, wherein the processing of the request message includes determining from the request message values for request parameters corresponding to the message type.

6. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 5, wherein the generating of the response message includes associating the response message with said message type and incorporating into the response message values for response parameters corresponding to said message type.

7. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 1, wherein, where the request message includes at least one sub-request, the generating of the response message includes generating the response message with at least one sub-response, each sub-response corresponding to one of at least one sub-request.

8. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 7, wherein the generating of the response message includes associating each sub-response with a identification code associated with the corresponding sub-request.

9. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 1, wherein the processing of the request message includes decoding the request message from extensible markup language (XML) and the generating of the response message includes encoding the response messages in XML.

10. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 1, wherein the request message is associated with a request message identification code and the response message is associated with the request message identification code.

11. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 1, wherein each predefined response and request document tag definition is associated with a message document header tag definition, corresponding one of a request and response message header tag definition and a message body tag definition.

12. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 11, wherein the corresponding one of a request and response message header tag definition is associated with a predefined sender tag definition and a recipient tag definition.

13. (Original) The method for automating communications between service providers in connection with providing the high speed network access service of claim 11, wherein the message body tag definition is associated with a type tag definition having a corresponding one of a sub-request and a sub-response tag definition.

14. (Currently Amended) A computer-implemented system for automating communications between service providers in connection with providing a high speed network access service, comprising:

a request processor adapted to electronically receive and process a request message relating to the high speed network access service received from a first service provider by a second service provider of the high speed network access service via a network, the first and second service providers cooperating to provide high speed network access service to an end subscriber;

a response generator of the second service provider adapted to automatically generate the response message in response to the request message from the first service provider;
and

an operations support system of the second service provider adapted to process data from the request message from the first service provider to facilitate the response generator in generating the response message for transmission to the first service provider via the network automatically upon generating of the response message,

wherein the request processor of the second service provider processes the request message according to a predefined request document tag definition and the response generator of the second service provider generates the response message in conformity with a predefined response document tag definition.

15. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 14, wherein the request process determines a type associated with the request message, the type being selected from the group consisting of service availability, DSL service, order entry, order status, order summary, trouble ticket entry, trouble ticket status, and trouble ticket summary.

16. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 15, wherein the request processor utilizes the predefined request document tag definition corresponding to the request message type in processing the request message.

17. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 15, wherein the response generator generates the response message in conformity with the predefined response document tag definition corresponding to the response message type and associates the response message with the request message type.

18. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 15, wherein the request processor is adapted to determine from the request message values for request parameters corresponding to the message type.

19. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 18, wherein the response generator is adapted to associate the response message with said message type and to incorporate into the response message values for response parameters corresponding to said message type.

20. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 14, wherein the request processor is adapted to decode the request message from extensible markup language (XML) and the response generator is adapted to encode the response message in XML.

21. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 14, wherein each predefined response and request document tag definition is associated with a message document header tag definition, corresponding one of a request and response message header tag definition and a message body tag definition.

22. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 21, wherein the corresponding one of a request and response message header tag definition is associated with a predefined sender tag definition and a recipient tag definition.

23. (Original) The system for automating communications between service providers in connection with providing the high speed network access service of claim 21, wherein the message body tag definition is associated with a type tag definition having a corresponding one of a sub-request and a sub-response tag definition.

24. (Currently Amended) A computer program product that automates communications between service providers in connection with providing a high speed network access service, comprising

computer code that receives a request message relating to the high speed network access service from a first service provider by a second service provider of the high speed network access service via a network, the first and second service providers cooperating to provide high speed network access service to an end subscriber;

computer code of the second service provider that processes the request message from the first service provider automatically upon the receiving using a computer system to automatically generate a response message to the request message by the second service provider, wherein the computer code of the second service provider that processes the request message utilizes a predefined request document tag definition and the computer code of the second service provider that generates the response message utilizes a predefined response document tag definition;

computer code that transmits the response message from the second service provider to the first service provider via the network automatically upon completion of the processing; and

a computer readable medium that stores the computer codes.

25. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 24, wherein the computer code that processes the request message determines a type with which the request message is associated, the type is selected from the group consisting of service availability, DSL service, order entry, order status, order summary, trouble ticket entry, trouble ticket status, and trouble ticket summary.

26. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 25, wherein the computer code that processes the request message utilizes the predefined request document tag definition corresponding to the request message type.

27. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 25, wherein the computer code that generates the response message generates the response message in conformity to the predefined response document tag definition corresponding to the response message type and associates the response message with the request message type.

28. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 25, wherein the computer code that processes the request message includes determining from the request message values for request parameters corresponding to the message type.

29. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 28, wherein the computer code that generates the response message includes associating the response message with said message type and incorporating into the response message values for response parameters corresponding to said message type.

30. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 24, wherein the computer code that generates the response message encodes the response message in extensible markup language (XML).

31. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 24, wherein each predefined response and request document tag definition is associated with a message document header tag definition, corresponding one of a request and response message header tag definition and a message body tag definition.

32. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 31, wherein the corresponding one of a request and response message header tag definition is associated with a predefined sender tag definition and a recipient tag definition.

33. (Original) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 31, wherein the message body tag definition is associated with a type tag definition having a corresponding one of a sub-request and a sub-response tag definition.

34. (New) The method for automating communications between service providers in connection with providing the high speed network access service of claim 1, wherein the first service provider of the high speed network access service is an Internet service provider (ISP) and the second service provider of the high speed network access service is selected from the group consisting of a digital subscriber line (DSL) service provider, an Integrated Services Digital Network (ISDN) service provider, a cable high speed network access service provider, and a wireless satellite high speed network access provider.

35. (New) The system for automating communications between service providers in connection with providing the high speed network access service of claim 14, wherein the first service provider of the high speed network access service is an Internet service provider (ISP) and the second service provider of the high speed network access service is selected from the group consisting of a digital subscriber line (DSL) service provider, an Integrated Services Digital Network (ISDN) service provider, a cable high speed network access service provider, and a wireless satellite high speed network access provider.

36. (New) The computer program product that automates communications between service providers in connection with providing a high speed network access service of claim 31, wherein the first service provider of the high speed network access service is an Internet service provider (ISP) and the second service provider of the high speed network access service is selected from the group consisting of a digital subscriber line (DSL) service provider, an Integrated Services Digital Network (ISDN) service provider, a cable high speed network access service provider, and a wireless satellite high speed network access provider.